

Amendment After Final Rejection  
Serial No. 10/014,195

Docket No. US010575

### REMARKS

Entry of this amendment and reconsideration are respectfully requested in view of the amendments made to the claims and for the remarks made herein.

Claims 1-9, 18, 20 and 22-24 are pending and stand rejected. Claims 10-17, 19, 21 and 25-33 were withdrawn from consideration in a prior Office Action response.

Claims 1-4, 6, 7-9, 18 and 20 stand rejected under 35 USC 102(e) as being anticipated by Linden (USP no. 6,266,649), which is the same reason recited in rejecting the claims in the prior Office Action. The instant Office further states that "Linden teaches '[t]he similarities reflected by the tables are based on the collective interest of the community of users' (Abstract), '[t]he present invention addresses these and other problems ... generating personalized recommendation of items based on the collective interest of a community of users' (col. 2, lines 33-37) and col. 8, lines 64- col. 9, lines 1-15)."

Applicant thanks the Examiner for the additional reasoning for rejecting the claims, but continues to respectfully disagree with the reason for rejecting the claims for the same reasons recited in applicant's response to the rejection of the claims in the prior Office Action. However, in the interest of advancing the prosecution of this matter, the independent claims have been amended to more clearly state the invention. More specifically, the claims have been amended to recite "partitioning said third party selection history indicating items that are selected by at least one third party into clusters of items, said clusters being determined based on typical patterns of items selected by representative users, said items being similar." No new matter has been added.

Support for the amendment may be found at least on page 3, lines 28-30, which state, "[t]he third party viewing or purchase history is processed to generate stereotype profiles that reflect the typical patterns of items selected by representative users. As used herein, a stereotype profile is a cluster of items ... that are similar to one another in some way."

Linden discloses a recommendation system for recommending items to individual users based on a set of items that are known to be of interest to the users, such as a set of

Amendment After Final Rejection  
Serial No. 10/014,195

Docket No. US010575

items previously purchased by the user. (see Abstract). The recommendation system first identifies items known to be of interest to the user (step 80, Fig. 2) and then retrieves similar items for each item of known interest (step 82, Fig. 2). The similar items are "based on the collective interests of the community of users. For example, ... the similarities are based on correlations between the purchases of items by users (e.g., items A and B are similar because a relatively large portion of the users that purchased item A also bought item B." (see abstract). The similar items are combined, sorted and filtered using the user provided items as a reference and presented to the user. (Fig. 2, steps 84-94).

Linden, accordingly, teaches a system that provides a user with recommendations of third-party users based on an input provided by the user. However, Linden fails to teach a system that partitions third-party information into clusters of similar items and then enables a user to select a cluster and use the information in the cluster to setup the user profile, as is recited in the claims.

It is well recognized that to constitute a rejection pursuant to 35 USC §102, i.e., anticipation, all material elements recited in a claim must be found in one unit of prior art.

Linden cannot be said to anticipate the present invention, because Linden fails to disclose each and every element recited. Linden fails to disclose forming the third-party user information into clusters independent of a user input.

At least for this reason, applicant submits that the rejection of the claim has been overcome and can no longer be sustained. Applicant respectfully requests withdrawal of the rejection and allowance of the claim.

With regard to the remaining independent claim, this claim recites subject matter similar to that recited in claim 1 and was rejected for the same reason used in rejecting claim 1. Thus, for the amendments made to this claim, which are similar to the amendments made with regard to claim 1 and for the remarks made in response to the rejection of claim 1, which are also applicable in response to the rejection of this claim, and reasserted, as if in full, herein, applicant submits that the reason for rejecting this claim has been overcome and the rejection can no longer be sustained. Applicant respectfully requests withdrawal of the rejection and allowance of the claims.

Amendment After Final Rejection  
Serial No. 10/014,195

Docket No. US010575

With regard the remaining claims these claims ultimately depend from the independent claims, which have been shown to contain subject matter not disclosed by, and, hence, allowable over, the reference cited. Accordingly, these claims are also allowable by virtue of their dependency from an allowable base claim.

Accordingly, applicant respectfully requests withdrawal of the rejection and allowance of the claims.

Claims 5 and 22-24 stand rejection under 35 USC 103(a) as being unpatentable over Linden in view of Official Notice.

Applicant respectfully disagrees with and explicitly traverses the reason for rejecting the claims.

The aforementioned claims depend from the independent claims, which have been shown to contain subject matter not disclosed by Linden. The Examiner's taking of Official Notice fails to provide any teaching of the subject matter shown to be lacking in Linden.

A claimed invention is *prima facie* obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings therein. Second, there must be a reasonable expectation of success. And, third, the prior art reference or combined references must teach or suggest all the claim limitations.

In this case, the combination of Linden and Office Notice fails to render the subject matter recited in the instant application as the combination fails to teach or suggest all the claim limitations.

For at least this reason, applicant submits that the reason for the rejection has been overcome and respectfully requests that the rejection be withdrawn.

In addition, the instant Office Action states that "it would have been obvious ... to have included k-means clustering routine in order to obtain the above mentioned advantage (Official Notice is taken that it is old and well-known to employ a means routine because such a modification would provide a midway position or average value.)."

Amendment After Final Rejection  
Serial No. 10/014,195

Docket No. US010575

However, the Office Action fails to show where Linden suggests using a k-means algorithm for determining similar items based on a user input or why it would be useful to include such a k-means algorithm.

A K-means algorithm may be summarized as:

K-means (MacQueen, 1967) is one of the simplest unsupervised learning algorithms that solve the well known clustering problem. The procedure follows a simple and easy way to classify a given data set through a certain number of clusters (assume k clusters) fixed a priori. The main idea is to define k centroids, one for each cluster. These centroids should be placed in a cunning way because of different location causes different result. So, the better choice is to place them as much as possible far away from each other. The next step is to take each point belonging to a given data set and associate it to the nearest centroid. When no point is pending, the first step is completed and an early group age is done. At this point we need to re-calculate k new centroids as barycenters of the clusters resulting from the previous step. After we have these k new centroids, a new binding has to be done between the same data set points and the nearest new centroid. A loop has been generated. As a result of this loop we may notice that the k centroids change their location step by step until no more changes are done. In other words centroids do not move any more.

Accordingly, a k-means algorithm finds centroids of clusters and matches data to the centroids, whereas Linden determines data points that match the user input.

Hence, there is no motivation to incorporate a K-means algorithm into the teachings of Linden, as the K-means algorithm would require the generation of k new centroids when Linden seeks to determine a single centroid based on the user input.

For at least this reason also applicant submits that the reason for the rejection has been overcome and respectfully requests that the rejection be withdrawn.

In addition, in applicant's response to the rejection of the claims, applicant had respectfully requested that the Examiner provide prior art references to show that it is well-known to partition third-part selection history into clusters of items employing a k-means clustering routine. Applicant again respectfully requests that the Examiner provide such a prior art reference.

Although the last Office Action was made final, this amendment should be entered. No matter has been added to the claims that would require comparison with the prior art or any further review. Accordingly, pursuant to MPEP 714.13, applicant's amendments should only require a cursory review by the examiner. The amendment therefore should be entered without requiring a showing under 37 CFR 1.116(b).

Amendment After Final Rejection  
Serial No. 10/014,195

Docket No. US010575

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

Paul Im  
Registration No. 50,418

  
By: Steve Cha  
Attorney for Applicant  
Registration No. 44,069

Date: July 26, 2006

**Mail all correspondence to:**  
Paul Im, Registration No. 50,418  
US PHILIPS CORPORATION  
P.O. Box 3001  
Briarcliff Manor, NY 10510-8001  
Phone: (914) 333-9624  
Fax: (914) 332-0615